

What is claimed is:

1. A compound single crystal substrate, a basal plane of which is a nonpolar face and said basal plane has a partial surface having polarity (hereinafter referred to a partial polar surface),

characterized in that said partial polar surface is a polar portion with surface energy higher than said basal plane.

2. The compound single crystal substrate according to Claim 1, wherein said compound is a group IV-IV compound, group III-V compound, or group II-VI compound.

3. The compound single crystal substrate according to Claim 1, wherein said compound single crystal is cubic, said basal plane is (001) face, and said partial polar surface is (111) face.

4. The compound single crystal substrate according to Claim 1, wherein said compound single crystal is hexagonal, said basal plane is (1,1,-2,0) or (1,-1,0,0) face, and said partial polar surface is (0001) face.

5. The compound single crystal substrate according to Claim 1, wherein said compound single crystal is cubic silicon carbide, said basal plane is (001) face, and said partial polar surface is Si (111) face.

6. The compound single crystal substrate according to Claim 1, wherein said compound single crystal is cubic gallium nitride, said basal plane is (001) face, and said partial polar surface is Ga (111) face.

7. The compound single crystal substrate according to Claim 1, wherein said compound single crystal is hexagonal silicon carbide, said basal plane is (1,1,-2,0) or (1,-1,0,0) face and said partial polar surface is Si (0001) face.

8. The compound single crystal substrate according to Claim 1, wherein said compound single crystal is hexagonal gallium nitride, said basal plane is (1,1,-2,0) or (1,-1,0,0) face, and said partial polar surface is Ga (0001) face.

9. A method of manufacturing the compound single crystal substrate according to Claim 1, comprising the steps of:

epitaxially growing a compound single crystal in the normal direction on a basal plane of a compound single crystal substrate wherein the basal plane is a nonpolar face and has a partial polar surface in a portion thereof, and

either cutting the compound single crystal layer that has been grown in parallel to the basal plane, or removing at least said substrate to obtain a compound single crystal block, a basal plane of which is a nonpolar face only having a partial polar surface with the highest surface energy in a portion thereof.

10. A laminate having, on the basal plane of the compound single crystal substrate according to Claim 1, a compound single crystal layer that is homogeneous or heterogeneous with said substrate,

characterized in that the single crystal constituting said compound single crystal layer has crystallinity and a spatial lattice that are homogeneous with those of said substrate and has a nonpolar basal plane, and an area occupied by a partial surface having surface polarity in said nonpolar basal plane is 0.1 percent or less of the total area of the basal plane.

11. A method of manufacturing a compound single crystal laminate, characterized in that a compound single crystal layer that is homogeneous or heterogeneous with the compound constituting said single crystal substrate is epitaxially grown on the basal plane of the compound single crystal substrate according to Claim 1.